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(54) Title: INTRA-VASCULAR ADMINISTRATION OF PARTICLES TO INDUCE PULMONARY HYPERTENSION, PULMONARY HYPERTENSION SYNDROME, AND ASCITES IN ANIMALS

(57) Abstract: The invention relates to a new process for inducing pulmonary hypertension (elevated blood pressure in the pulmonary arteries) in animals, with the objective of identifying and/or eliminating susceptible individuals or families to achieve genetic improvement in agriculturally important breeds of poultry (broiler chickens and turkeys), and cattle. The invention will also be useful for animal research directed toward understanding pulmonary hypertension and its sequelae in human patients as well as in animals. Sustained pulmonary hypertension leads to pulmonary hypertension syndrome, which adversely impacts poultry production throughout the world, as well as cattle production when cattle are kept at latitudes sufficiently high to challenge blood oxygenation. In poultry, the pathophysiological progression of pulmonary hypertension syndrome leads to terminal ascites (fluid accumulation in the abdominal cavity) followed by death of the animal.